

NEVADA ALIGNMENT FOR NIH SUPPLEMENT HUMAN GENETIC VARIATION

HUMAN GENETIC VARIATION		
Nevada Science Academic Standards: Grades 9 – 12		
Activity	Standard	Objective
1, 4	N.12.A.1	Students know tables, charts, illustrations and graphs can be used in making arguments and claims in oral and written presentations.
3	N.12.A.3	Students know repeated experimentation allows for statistical analysis and unbiased conclusions.
2, 3, 4	N.12.A.5	Students know models and modeling can be used to identify and predict cause-effect relationships.
2, 3, 4, 5	N.12.B.1	Students know science, technology, and society influenced one another in both positive and negative ways.
3, 5	N.12.B.3	Students know the influence of ethics on scientific enterprise.
2, 3, 4, 5	N.12.B.4	Students know scientific knowledge builds on previous information.
All activities	L.12.A.1	Students know genetic information passed from parents to offspring is coded in the DNA molecule.
All activities	L.12.A.2	Students know DNA molecules provide instructions for assembling protein molecules.
2, 4	L.12.A.4	Students know several causes and effects of somatic versus sex cell mutations.
2, 3, 4, 5	L.12.B.3	Students know disease disrupts the equilibrium that exists in a healthy organism.
2, 4	L.12.C.1	Students know relationships of organisms and their physical environment.
Nevada Mathematics Academic Standards: Grades 9 – 12		
Activity	Standard	Objective
2	A.1	Generalize solutions and apply previous knowledge to new problem solving situations.
2	A.2	Determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem.
2, 3	A.5	Identify necessary and extraneous information.
2	A.8	Apply combinations of proven strategies and previous knowledge to solve non-routine problems.
2, 3	B.2	Model and explain mathematical relationships using oral, written, graphic, and algebraic methods.
2, 3	B.5	Use everyday language, both orally and in writing, to communicate strategies and solutions to problems using appropriate mathematical language.
2, 3	D.4	Apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science.
2, 3	D.5	Identify, explain, and apply mathematics in everyday life.
2	1.12.6	Determine an approximate value of radical and exponential expressions using a variety of methods.
2, 3	1.12.8	Identify and apply real number properties to solve problems.
2	3.12.3	Select and use appropriate measurement tools, techniques, and formulas to solve problems in mathematical and practical situations.

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1, 3	5.12.1	Organize statistical data through the use of tables, graphs, and matrices (with and without technology).
1	5.12.3	Distinguish between a sample and a census.
Nevada English Language Arts Academic Standards: Grade 12		
Activity	Standard	Objective
2, 3, 4, 5	1.12.3	Apply knowledge of Anglo-Saxon-, Greek-, and Latin-derived roots and affixes to determine the meaning of unknown vocabulary across the curriculum.
2, 3, 4, 5	2.12.1	Refine pre-reading strategies such as accessing prior knowledge, predicting, previewing, and setting a purpose to ensure comprehension.
2, 3, 4, 5	4.12.3	Locate, organize, interpret, and synthesize information in multiple primary and secondary sources to support ideas and positions.
2, 3, 4, 5	4.12.4	Critique the power, logic, reasonableness, and audience appeal of arguments advanced in texts.
1, 2, 3, 4	4.12.6	Read and apply multi-step directions to perform complex procedures and tasks.
2, 3, 4	5.12.2	Produce subject-specific technical writing, such as instructions for a shop project or field reports for science.
2, 3, 4	5.12.5	Write summaries or abstracts that distill large amounts of information into clear, concise prose.
5	5.12.6	Write persuasive texts that evaluate, interpret, or speculate using specific rhetorical devices to support assertions; clarify and defend positions with precise and relevant evidence.
2, 3, 4	6.12.3	Write compositions that present complex ideas in a sustained and compelling manner.
2, 3, 4, 5	7.12.1	Apply the rules of usage, grammar, and capitalization with few significant errors; use modifiers, parallel structure, and subordination correctly in writing.
2, 3, 4, 5	7.12.3	Use rules of punctuation; manipulate conventions for emphasis in writing.
2, 3, 4, 5	7.12.5	Demonstrate conventional spelling.
2, 3, 4, 5	8.12.1	Summarize and evaluate communications that inform, persuade, and entertain.
All activities	9.12.1	Use specific and varied vocabulary and apply standard English to communicate ideas.
2, 3, 4, 5	10.12.1	Participate in problem-solving conversations or group discussions by identifying, synthesizing, and evaluating data.
3, 5	10.12.2	Negotiate to arrive at consensus by proposing and examining possible options.
2, 3, 4, 5	10.12.4	Justify a position using logic and refuting opposing viewpoints.
3	11.12.1	Formulate cross-curricular research questions and use an appropriate research design to gather information.
3	11.12.5	Organize and present research findings using appropriate media.
Nevada Health Education Core Curriculum Standards: High School		
Activity	Standard	Objective
4, 5	1.12.1	Assess the impact of personal history, health care choices, and the aging process on individual health.
2, 3, 4	1.12.6	Analyze how research and medical advances influence the prevention and control of disease.

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3, 4, 5	2.12.1	Analyze health promotion and disease prevention efforts.
2, 3, 4, 5	2.12.2	Critique sources of health information for accuracy.
2, 3, 4, 5	4.12.2	Explore how technology is used to enhance health.
All activities	5.12.1	Utilize skills for communicating effectively.
5	6.12.2	Demonstrate the ability to utilize various strategies when making decisions related to health needs and risks of young adults.
2, 3, 4, 5	6.12.3	Synthesize information on health resources.
2, 5	7.12.1B	Demonstrate the ability to adapt health messages to meet the characteristics and needs of a particular audience.